



# AFV's as a Climate Protection Strategy:

Lessons from CCP Local Governments

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- International association of local governments dedicated to the prevention and solution of local, regional, and global environmental problems through cumulative local action.
- 7 offices worldwide; working with cities, counties, and towns in over 50 countries.
- Founded in 1990, under auspices of the UN.
- ICLEI is the worldwide environmental agency for local governments.

# The Cities for Climate Protection<sup>®</sup> Campaign

- CCP is an international initiative bringing together more than 500 local governments to reduce emissions of greenhouse gases and improve air quality within their communities.
- 125+ cities and counties in the US participate.
- Representing 47+ million people
- 17 percent of U.S. greenhouse gas emissions
- CCP continues to grow around the world

# U.S. City & County CCP Participants



# Green Fleets<sup>TM</sup>

- The mission of ICLEI's Green Fleets initiative is to support greenhouse gas emissions reductions from the municipal fleet sector and from fleets and vehicles within the jurisdiction of CCP local government participants.
- We encourage CCP participants to formalize their fleet emission reduction activities by adopting a Green Fleets policy for fleets the municipality controls.

# Green Fleets<sup>TM</sup>

Emphasis on a Comprehensive Fleet Policy:

- "Right-sizing" vehicle fleets by downsizing and eliminating unnecessary vehicles from the fleet.
- Optimizing vehicle travel, operation, and maintenance.
- Substituting other travel modes, such as transit or bicycles, or reducing the need to travel.
- Purchasing fuel efficient, alternatively fueled, and electric vehicles (including hybrid vehicles).

# Comprehensive Approach

- Alternative fuel vehicles can be an important part of a comprehensive climate protection program.
- Does not need to be an “all or nothing” approach, different fuels and different vehicles can work in different situations.
- For many the choice of a fuel will be more of a political choice than any other factor, but that is generally OK.

# GhG Reduction from AFVs & Hybrids



Life-  
Cycle  
Relative  
to RFG  
Auto

Data from  
ANL  
GREET  
Model

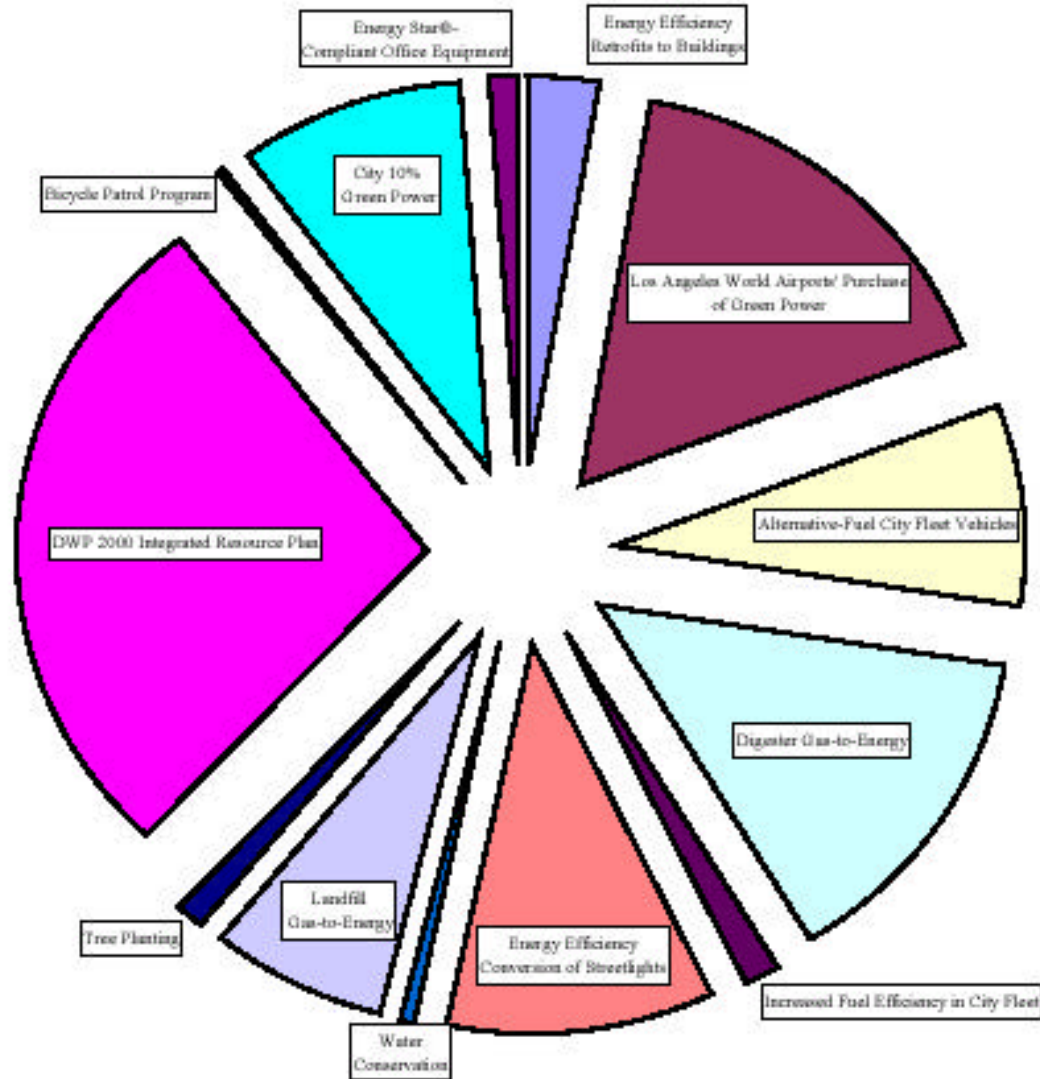
(Source:  
Transportation  
Energy Data  
Book 21)



## Example: LA's Climate Action Plan (CAP)

- Currently, about 5 percent of fleet AFVs
- By 2010 -> 45 percent of fleet AFVs
  - 44 percent light-duty vehicles
  - 29 percent medium-duty vehicles
  - mix of heavy-duty, but 100 percent of waste trucks and sweepers
- Estimated reduction of 60,364 tons of CO<sub>2</sub> in 2010 from AFV program

2010 Forecasted CO<sub>2</sub> Emission Reductions  
by Measure



LA  
CAP

<-----  
AFV  
% of  
CO<sub>2</sub>

# Other AFV Procurement Policies

- Fort Collins, CO
  - 75% of fleet ULEV(1998 standard) by 2008
- San Francisco, CA
  - 10 percent of all passenger vehicles and light duty trucks purchased by city must be ZEVs
- Santa Monica, CA
  - 75% of the City's fleet vehicles powered by REFs (reduced emission fuels) by 2000

# Trends for Local Govt Fleets

- Jurisdictions increasingly moving toward hybrid vehicles for light-duty fleets, although in Midwest ethanol is strong.
- Increasing trend toward alternative fuel use in heavy-duty vehicles, especially waste vehicles and street sweepers.
- Electric vehicles (esp. NEVs) still play a key role in some niches.

# Hybrid Vehicles: The Popular Choice

- Brookline, MA
- Seattle, WA
- Philadelphia, PA
- Fort Collins, CO
- Boulder, CO
- Denver, CO
- Boston, MA
- New York, NY
- Overland Park, KS

## Alachua County, FL

Replaced 3 Vehicles:

18, 28, & 19 mpg  
measured in use

Bought 3 Toyota Prius:

47, 57, and 61 mpg  
measured in use

Emissions Reduction:

8 tons eCO<sub>2</sub>/year

# Closed-Loop Communities

- San Diego is moving forward with LNG station at large dump.
- Methane from landfill used for LNG.
- 180 waste trucks to be converted to LNG.
- Some technical problems, but ...
- Eventual goal: A closed loop. The community's garbage fueling the community's garbage trucks!

# Local Governments as Examples

- An underpromoted aspect of an AFV strategy is the public outreach potential for promoting AFVs in the community.
- "As people see the city acquire these types of vehicles, it will raise the whole issue of alternative vehicles in the public's mind." -- Bill Douglas, City of Boulder fleet services coordinator

# Local Governments as Examples

"It was exciting to see ten Prius hybrids with the Alachua County logo on the side, all lined up in a row"





# Conclusion

- Long-term outlook toward hydrogen helps to simplify planning.
- Perhaps too much emphasis on fuel vs. fuel issues, often have no control.
- Quantifying the benefits is key to building and maintaining support.
- More information? [www.greenfleets.org](http://www.greenfleets.org)
- email: [bdrumheller@iclei.org](mailto:bdrumheller@iclei.org)